

plant installation can be used successfully. An inverted engine has the advantage of being entirely or partially enclosed, thereby providing a more pleasing and realistic appearance.

Construction can begin with the wing by cutting the spars to the correct taper. Follow this by sawing the plywood joiner in one piece and cementing it to the spars, thus forming the correct dihedral automatically. While this is drying, cut the ribs to shape. The sheet covering can now be cut to outline shape and butt-joined to form the correct chord width. Cement the spar to the lower covering, holding it in place with straight pins until dry. Attach the ribs to both the spar and lower covering.

Bend the wire landing gear struts. Make sure to form one left and one right hand strut. These struts are then sandwiched between two plywood sheets. Use plenty of cement and hold together with clamps until dry.

Slip the strut through the wing lower covering, from the top, and cement the plywood securely to the ribs, lower covering and spar. Pour several coats of cement around this joint to insure a firm installation as this is a point of great stress.

Carefully bevel the leading and trailing edges until the bevel meets the angle of the rib upper camber. Sand well.

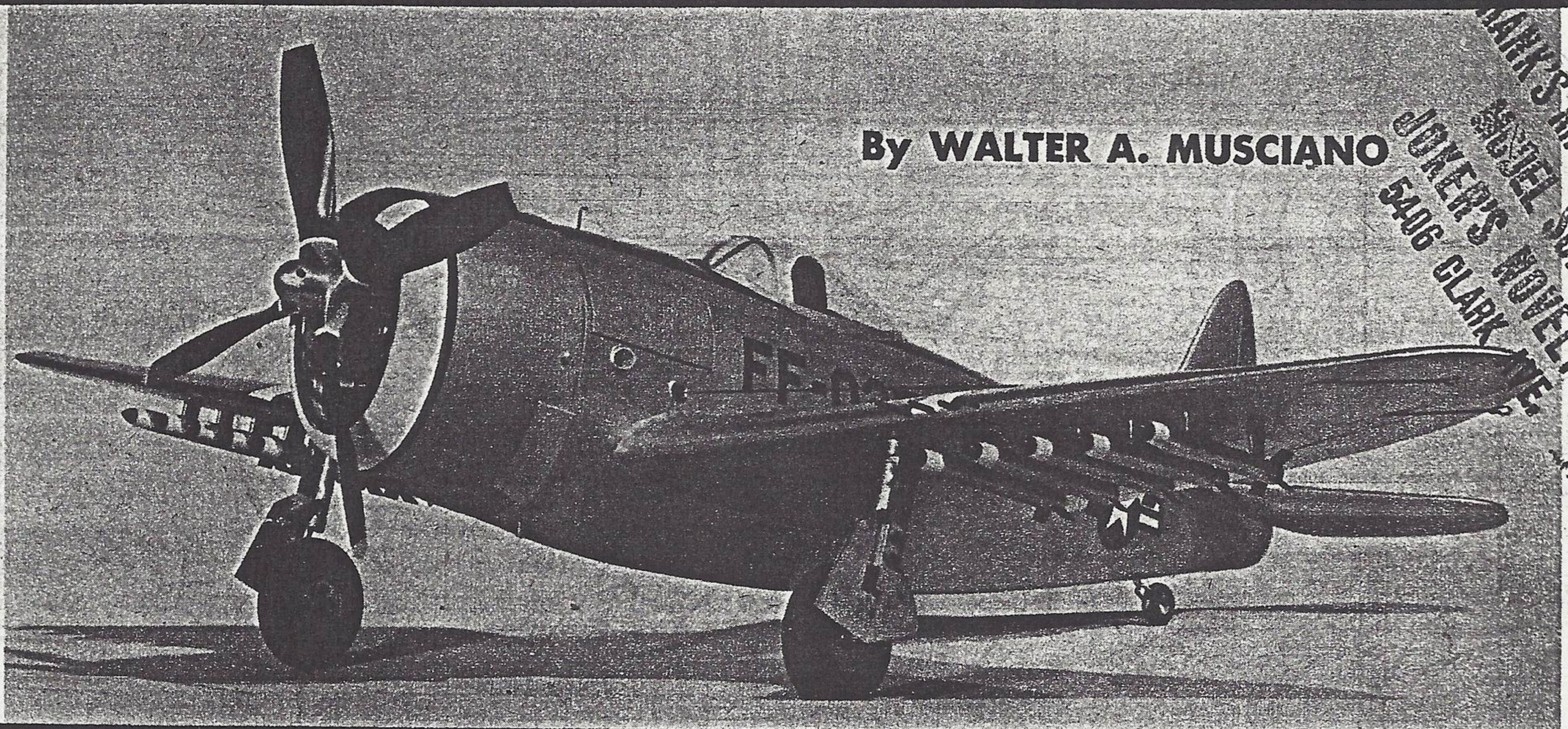
Cut the upper covering to shape, butt-join and cement it to the top of the spar. Hold in place with pins. Using a

line shape. Cement the elevator halves to the dowel spar and add the control horn. Hinge the elevator assembly to the stabilizer using standard fabric hinges. This assembly should then be securely cemented atop the pylon mount.

Many standard commercial metal or plastic bellcranks will fit your model. Attach the music wire lead-out lines securely by twisting and solder-sealing the twisted portion. The bellcrank is bolted to the mount after the wire control rod has been attached. Either offset-bend the ends of the rod as shown or solder a washer to the ends to prevent the control rod from slipping off the horn or bellcrank. Bolt the bellcrank to the mount in such a manner as to allow free movement of the control system. It is advisable to insert washers between the bellcrank and mount to total 1/16".

If the engine you choose has an attached tank—use it, otherwise many standard tanks can fit this model. Be sure to select the proper size fuel tank for your engine. This should be very firmly mounted within the fuselage. On some installations, it will be necessary to cut away the leading portion of the wing in order to fit the tank. Do not, however, ever cut away the spar or any portion of it. Add the plastic tubing filling, vent and feed line extensions at this time.

The fuselage is now planked after the remaining formers are cemented to the bottom of the wing. Begin by cementing one planking strip on each side and the very top and bottom of the fuselage. Hold these strips to the formers with pins



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FRANK'S MAGAZINE EXC
MODEL SUPPLIES
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slow-drying cement, apply it liberally to the ribs and beveled portion of the lower covering. Attach the top covering to the cemented surfaces and hold in place with straight pins until dry. It is suggested that the wing be set aside to dry overnight after the solid wing tips have been cemented in place.

While the wing is drying, the fuselage horizontal keel can be cut to shape as well as the formers and firewall. If a beam type engine mount is contemplated, it should be firmly cemented to the keel at this time. The hardwood bellcrank mount should also be cemented firmly to the keel now. Follow this by attaching the formers and firewall to the top and bottom of the keel. Add the stabilizer pylon mount to the keel.

Sandpaper the wing thoroughly and then attach the fuselage frame to it by cementing the formers to the wing covering. Check for correct incidence during this operation. This should be zero.

Cut the tail surface to outline form and sand to a stream-

until the cement has dried. Follow with another strip cemented to each side of the four already in place and continue in this manner. Make certain to cement all strips to the formers as well as to each other. Taper and bevel the last few strips in order to insure a good fit in the confined areas.

Fill in all cracks and crevices with Plastic Balsa, forcing the compound deep into the spaces with the fingers. When dry, the fuselage should receive a thorough sanding with 1/0 and then 3/0 sandpaper. It may be well to note that the forward ends of the planking strips rest on ledge formed by the difference in size of formers "A" and "B".

With sheet balsa as a pattern and foundation, the fillet is built of many layers of Plastic Balsa. This should be applied with the fingers to form a smooth contour between the fuselage and wing. Do not hesitate to apply added thickness to the fillet in order to be able to form a truly smooth fairing without the fear of oversanding. Much fillet sanding is done by wrapping the sandpaper around the fingers and sanding